

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION**

FUNDAMENTAL INNOVATION
SYSTEMS INTERNATIONAL, LLC,

Plaintiff,

v.

ZTE CORPORATION, et al.,

Defendants.

Civil Action No. 3:17-CV-01827-N

JURY TRIAL DEMANDED

**DEFENDANTS ZTE CORPORATION, ZTE (USA) INC., AND ZTE (TX), INC.
RESPONSE TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	FACTUAL BACKGROUND.....	1
	A. ZTE’s <i>Inter Partes</i> Review Petitions	2
	B. Summary Of The Prior Art	3
III.	LEGAL STANDARDS	4
	A. Summary Judgment	4
	B. Estoppel Under 35 U.S.C. § 315(e)(2).....	5
	C. Invalidity Based On Obviousness.....	5
IV.	ARGUMENT.....	7
	A. Estoppel Based On 35 U.S.C. § 315(e)(2) Does Not Apply To Grounds Petitioned In An <i>Inter Partes</i> Review But Not Instituted.....	7
	1. Federal Circuit Precedent Precludes Estoppel Here	7
	2. ZTE’s Filing Of Multiple IPR Petitions Is Irrelevant	10
	3. Plaintiff Cites Irrelevant Cases Involving Prior Art <i>Not</i> Included In An IPR Petition.....	12
	B. Summary Judgment Should Be Denied For Obviousness Of The ’111 And ’766 Patents Because There Are Genuine Disputes Of Material Fact	13
	1. Dr. Shoemaker Addressed Every Claim Limitation Without Any Improper Reliance On Hindsight	14
	2. The Board’s Non-Institution Decisions Do Not Control Here.....	16
	3. The Cases Plaintiff Cites Do Not Justify Summary Judgment	17
V.	CONCLUSION.....	19

TABLE OF AUTHORITIES

Cases

<i>Adickes v. S. H. Kress & Co.</i> , 398 U.S. 144 (1970).....	5
<i>Anderson v. Liberty Lobby, Inc.</i> , 477 U.S. 242 (1986).....	5
<i>Biscotti Inc. v. Microsoft Corp.</i> , No. 2:13-CV-01015-JRG-RSP, 2017 WL 2526231 (E.D. Tex. May 11, 2017).....	5, 9
<i>California Inst. of Tech. v. Broadcom Ltd.</i> , No. CV 16-3714 GW (AGRX), 2018 WL 7456042 (C.D. Cal. Dec. 28, 2018).....	10
<i>Cheese Systems, Inc. v. Tetra Pak Cheese and Powder Systems, Inc.</i> , 725 F.3d 1341, 1354-56 (Fed. Cir. 2013)	18
<i>Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.</i> , 145 F.3d 1303 (Fed. Cir. 1998)	4
<i>Depomed, Inc. v. Purdue Pharma L.P.</i> , No. 13-571 MLC, Mem. Op. (D.N.J. Nov. 4, 2016)	8
<i>Douglas Dynamics, LLC v. Meyer Prod. LLC</i> , No. 14-CV-886-JDP, 2017 WL 1382556 (W.D. Wis. Apr. 18, 2017)	9, 16
<i>Graham v. John Deere Co. of Kansas City</i> , 383 U.S. 1 (1966).....	5
<i>Harmonic, Inc. v. Avid Technology, Inc.</i> , 815 F.3d 1356, 1363-64 (Fed. Cir. 2016)	19
<i>HP Inc. v. MPHJ Tech. Invs., LLC</i> , 817 F.3d 1339 (Fed. Cir. 2016)	5, 8
<i>Illumina, Inc. v. Qiagen N.V.</i> , No. C 16-02788 WHA, 2016 U.S. Dist. LEXIS 122571 (N.D. Cal. Sept. 9, 2016).....	8
<i>Intellectual Ventures I LLC v. Toshiba Corp.</i> , No. 13-453 SLR, 2016 U.S. Dist. LEXIS 174699 (D. Del., Dec. 19, 2016)	8
<i>Intellectual Ventures I LLC v. Toshiba Corp.</i> , No. 13-453 SLR, 2017 U.S. Dist. LEXIS 3800 (D. Del., Jan. 11, 2017)	8
<i>Intellectual Ventures I LLC v. Toshiba Corp.</i> , No. CV 13-453-SLR, 2017 WL 107980 (D. Del. Jan. 11, 2017)	12

<i>KSR Int’l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007).....	passim
<i>Milwaukee Elec. Tool Corp. v. Snap-On Inc.</i> , 271 F. Supp. 3d 990 (E.D. Wis. 2017).....	5, 8, 10, 11
<i>Nike, Inc. v. Adidas AG</i> , 812 F.3d 1326 (Fed. Cir. 2016)	17
<i>Oil-Dri Corp. of America v. Nestle Purina Petcare Co.</i> , No. 15-cv-1067, 2017 WL 3278915 (N.D. Ill. Aug. 2, 2017)	9
<i>Parallel Networks Licensing, LLC v. Int’l Bus. Machines Corp.</i> , No. CV 13-2072 (KAJ), 2017 WL 1045912 (D. Del. Feb. 22, 2017)	13
<i>Shaw Indus. Grp. v. Automated Creel Sys.</i> , 817 F.3d 1293 (Fed. Cir. 2016)	passim
<i>St. Jude Medical, Inc. v. Access Closure, Inc.</i> , 729 F.3d 1369, 1381 (Fed. Cir. 2013)	18
<i>Synopsys, Inc. v. Mentor Graphics Corp.</i> , 814 F.3d 1309 (Fed. Cir. 2016)	5, 8
<i>Trustees of Columbia Univ. in the City of N.Y. v. Symantec Corp.</i> , No. 3:13-cv-808, 2019 WL 2814682 (E.D. Va. Jul. 2, 2019)	13
<i>Verinata Health, Inc. v. Ariosa Diagnostics, Inc.</i> , No. 12-cv-05501-S1, 2017 U.S. Dist. LEXIS 7728 (N.D. Cal. Jan. 19, 2017)	8, 9, 10, 11
<i>Zitovault v. Int’l Bus. Mach. Corp.</i> , No. 3:16-cv-962, 2018 WL 2971178 (N.D. Tex. Apr. 4, 2018).....	13

Statutes

35 U.S.C. § 103.....	5, 6
35 U.S.C. § 315(e)(2).....	5, 7

Rules

Fed. R. Civ. P. 56(c)	4, 5
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I. INTRODUCTION

Defendants ZTE Corporation, ZTE (USA) Inc. and ZTE (TX), Inc. (collectively “ZTE”) respectfully ask the Court to deny the motion for partial summary judgment filed by Plaintiff Fundamental Innovation Systems International, LLC. Plaintiffs’ motion is contrary to both the law and the facts of this case.

Plaintiff first argues that ZTE should be estopped from challenging the validity of one asserted patent because ZTE could have presented the same argument to the Patent Trial and Appeal Board in a petition for *inter partes* review. In fact, ZTE *did* present the same argument in an *inter partes* review petition, and the Board denied institution. Under established precedent, there can be no estoppel under these circumstances, and summary judgment is improper as a matter of law.

Plaintiff next argues that summary judgment is appropriate with respect to two other asserted patents because there are no genuine disputed issues of material fact and ZTE’s invalidity arguments fail as a matter of law. On the contrary, ZTE and its expert witness, Dr. Matthew Shoemake, have presented detailed and thorough evidence that these two patents are invalid. Plaintiff may not agree with Dr. Shoemake’s conclusions, but as explained in detail below genuine factual disputes preclude summary judgment on these issues.

II. FACTUAL BACKGROUND

Plaintiff Fundamental Innovation Systems International, LLC (“Fundamental Innovation”) asserts five patents in this case: U.S. Patent Nos. 7,239,111 (“the ’111 patent”); 7,834,586 (“the ’586 patent”); 8,232,766 (“the ’766 patent”); 8,624,550 (“the ’550 patent”) (collectively, “the Fischer patents”); and 7,893,655 to Veselic (“the ’655 patent” or the “Veselic patent”). The present motion is directed only to the Fischer ’111, ’766, and ’550 patents.

Plaintiff contends that the Fischer patents essentially cover all modern forms of high-speed USB charging. Defendants ZTE Corporation and ZTE (USA) Inc. (collectively “ZTE”), which make and sell the phones and charging adapters accused in this case, contend that the patents are more limited and that their products do not infringe. For purposes of the trial in this case, ZTE also contends that all four of the Fischer patents are invalid based on the prior art.

A. ZTE’s *Inter Partes* Review Petitions

ZTE previously challenged the patentability of certain claims of each Fischer patent in petitions for *inter partes* review before the Patent Trial and Appeal Board (“Board”). According to Board procedures, after a party files a petition for *inter partes* review, the patent owner has an opportunity to file a preliminary response. The Board then decides whether to institute the *inter partes* review proceeding. Absent leave of the Board, the petitioner has no right to file a reply or otherwise respond to the patent owner’s arguments prior to institution. If the Board denies institution, the decision is not appealable. If the Board grants institution, then the parties proceed with a trial, which includes discovery, additional briefing, and oral argument. The Board then issues a final written decision on the merits.

In response to ZTE’s petitions, the Board instituted one *inter partes* review proceeding on the Fischer ’550 patent. The instituted ’550 proceeding involved a specific combination of two prior art patents, U.S. Patent Nos. 6,556,564 (“Rogers”) and 6,625,738 (“Shiga”). After trial on the merits, the Board issued a final written decision affirming the patentability of the claims as to this specific prior art combination. ZTE is no longer relying on this combination in any of its invalidity contentions.

With respect to ZTE’s other petitions on the Fischer patents, the Board denied institution. This included a second petition directed to the ’550 patent based on a *different* combination of prior art patents, U.S. Patent No. 7,360,004 (“Dougherty”) and Shiga. The Board also denied

institution as to two petitions ZTE filed challenging the claims of the '111 and '766 patents as unpatentable based on prior art U.S. Patent No. 5,925,942 ("Theobald") in combination with Shiga.

B. Summary Of The Prior Art

Dougherty taught a laptop computer docking station that used a USB connector to deliver to the laptop up to 2.5 amps of current at up to 18 volts. Both of these values far exceeded the USB 2.0 power limits in existence at the time. *See, e.g.*, Adickman Decl. Ex. 2, App. 000316-318 at ¶¶ 213-222.

Theobald taught a charging system for a mobile phone, including both a mid-rate charger and a fast-rate charger. *Id.*, App. 000299-300 at ¶¶ 127-131. The fast-rate charger supplied current up to 850 milliamps, which also exceeds the USB 2.0 power limits. *Id.* Theobald described this system in the context of a specific J3-type connector that was commonly used with Motorola phones at the time, but Theobald also suggested that it could be used with "any other suitable multiple pin accessory connector having an external power supply pin and at least one information pin." Adickman Decl. Ex. 2, 000302 at ¶¶ 139-140; Ex. 11, App. 001079 at 3:20-26.

Shiga taught a USB device that could turn on a host computer's power supply even when the host computer's power supply had been off. In other words, the USB device could "wake up" the host computer by sending a specific signal over the USB data lines. Adickman Decl., Ex. 2, App. 000300-301 at ¶¶ 132-137. To initiate this process, Shiga taught using a "fourth mode," which involved sending a logic high voltage on both the D+ and D- data lines of the USB connection. *Id.*, App. 000301 at ¶ 137. The USB 2.0 specification defined this signal as SE1, which was an abnormal data condition that the specification prohibited sending on the data lines

intentionally. *Id.*, App. 000286-287 at ¶¶ 81, 85. Accordingly, Shiga’s use of the signal represented an intentional departure from the USB 2.0 specification.

Defendants’ invalidity contentions for the Fischer patents rely on specific combinations of the Dougherty, Theobald, and Shiga teachings, as well as the opinions of Dr. Matthew Shoemake. Dr. Shoemake has opined that the asserted claims of the Fischer patents are invalid based on the prior art. *See, e.g., id.*, App. 000295-296 at ¶¶ 106-109. Properly basing his analysis on the teachings in the prior art references and the knowledge those of ordinary skill in the art had at the time, Dr. Shoemake concluded that the claimed subject matter was obvious. As explained in more detail below, Dr. Shoemake did not “fill in” any missing limitations or rely on improper hindsight.

As part of his analysis, Dr. Shoemake considered all of the relevant Board decisions relating to ZTE’s *inter partes* review petitions, including the Board’s decisions to deny institution in certain proceedings. Where he disagreed with the Board’s conclusions, Dr. Shoemake explained why he believed the Board erred in its interpretation of the prior art and/or provided additional information that the Board did not consider. *See, e.g., id.*, App. 000299 at ¶¶ 123-125, App. 000315-316 at ¶¶ 206-212, App. 000336 at ¶¶ 306-310.

III. LEGAL STANDARDS

A. Summary Judgment

Summary judgment is appropriate when “there is no genuine issue of material fact and . . . the moving party is entitled to a judgment as a matter of law.” Fed. R. Civ. P. 56(c). When deciding a summary judgment motion, a court must view the facts in the light most favorable to the nonmoving party and draw all inferences and doubts in that party’s favor. *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*, 145 F.3d 1303, 1307 (Fed. Cir. 1998). The moving party bears the burden of showing that the record discloses no genuine

issues as to any material fact and that it is entitled to judgment as a matter of law. *See* Fed. R. Civ. P. 56(c); *see also Adickes v. S. H. Kress & Co.*, 398 U.S. 144, 157 (1970). There is a genuine issue for trial “if the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986).

B. Estoppel Under 35 U.S.C. § 315(e)(2)

35 U.S.C. § 315(e)(2) provides for estoppel in district court against asserting “any ground that the [IPR] petitioner raised or reasonably could have raised during that *inter partes* review.” 35 U.S.C. § 315(e)(2) (bolding added). The Federal Circuit has held that the *inter partes* review does not begin until after institution. *Shaw Indus. Grp. v. Automated Creel Sys.*, 817 F.3d 1293, 1300 (Fed. Cir. 2016); *see also HP Inc. v. MPHJ Tech. Invs., LLC*, 817 F.3d 1339, 1347 (Fed. Cir. 2016). Accordingly, grounds included in a petition, but not instituted, are not grounds that a petitioner raised (or could have raised) *during* the IPR. *Synopsys, Inc. v. Mentor Graphics Corp.*, 814 F.3d 1309, 1316 (Fed. Cir. 2016); *see also Milwaukee Elec. Tool Corp. v. Snap-On Inc.*, 271 F. Supp. 3d 990, 1028 (E.D. Wis. 2017); *Biscotti Inc. v. Microsoft Corp.*, No. 2:13-CV-01015-JRG-RSP, 2017 WL 2526231, at *6 (E.D. Tex. May 11, 2017).

C. Invalidity Based On Obviousness

“A patent for a claimed invention may not be obtained . . . if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.” 35 U.S.C. § 103. In *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), the Supreme Court set out a framework for applying this statutory language of § 103:

Under § 103 the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and

the level of ordinary skill in the pertinent art resolved. Against this background, the obvious or nonobviousness of the subject matter is determined.

383 U.S. at 17-18.

More recently, the Supreme Court rejected the Federal Circuit's approach to obviousness when it became too "rigid" and departed from the "expansive and flexible approach" established by § 103 and the *Graham* decision. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 401 (2007). In *KSR*, the Supreme Court provided extensive guidance on how to approach the obviousness inquiry, including that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.*, 550 U.S. at 415. Put another way, "[i]f a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability." *Id.*, 550 U.S. at 417.

"Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effect of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *Id.*, 550 U.S. at 417-18. In doing so, [t]he obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents." *Id.*, 550 U.S. at 419. "Granting patent protection to advances that would occur in the ordinary course without real innovation retards progress and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility." *Id.*.

"One of the ways in which a patent's subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious

solution encompassed by the patent’s claims.” *Id.*, 550 U.S. at 419-20. But care must be taken to avoid improperly restricting the obviousness analysis to solutions aimed at the specific problem the inventors intended to address. In *KSR*, the Supreme Court noted that the Federal Circuit had erred “in its assumption that a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem.” *Id.*, 550 U.S. at 420. A court must give credit to the level of creativity natural in those of ordinary skill at the time. “A person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.*, 550 U.S. at 421.

Finally, care must be taken to avoid improper hindsight analysis, but “[r]igid preventative rules that deny factfinders recourse to common sense . . . are neither necessary under [Supreme Court] case law nor consistent with it.” *Id.*

IV. ARGUMENT

A. Estoppel Based On 35 U.S.C. § 315(e)(2) Does Not Apply To Grounds Petitioned In An *Inter Partes* Review But Not Instituted

ZTE should not be estopped from asserting invalidity grounds it included in the IPR2018-00110 petition against the ’550 Patent because those grounds were not instituted. The Federal Circuit has consistently interpreted § 315 to mean that the statutory estoppel it creates does not apply to invalidity grounds presented in the IPR petition but denied institution by the PTAB.

1. Federal Circuit Precedent Precludes Estoppel Here

In *Shaw Indus. Grp. v. Automated Creel Sys.*, 817 F.3d 1293 (Fed. Cir. 2016), the Federal Circuit held that the statute is directed to grounds that a petitioner raised (or reasonably could have raised) “during” the IPR:

Both parts of § 315(e) create estoppel for arguments “on any ground that the petitioner raised or reasonably could have raised *during* that inter partes review.” Shaw raised its [specific] ground in its petition for IPR. But the PTO denied the petition as to that ground, thus no IPR was instituted on that ground. The IPR does

not begin until it is instituted. . . . Thus, Shaw did not raise—nor could it have reasonably raised—the [specific] ground *during* the IPR. The plain language of the statute prohibits the application of estoppel under these circumstances.

Id. at 1300 (emphasis in original). The *Shaw* panel’s reasoning is clear: because the IPR proceeding only begins once the PTAB “trial” is instituted, it follows that non-instituted grounds are not grounds that a petitioner raised (or could have raised) *during* the IPR. The Federal Circuit reiterated this reasoning in *HP Inc. v. MPHJ Tech. Invs., LLC*, 817 F.3d 1339, 1347 (Fed. Cir. 2016) (finding that HP would not be estopped from pursuing an invalidity ground denied institution because “noninstituted grounds do not become a part of the IPR. Accordingly, the noninstituted grounds were not raised and, as review was denied, could not be raised in the IPR.”); *see also Synopsys, Inc. v. Mentor Graphics Corp.*, 814 F.3d 1309, 1316 (Fed. Cir. 2016) (“The validity of claims for which the Board did not institute *inter partes* review can still be litigated in district court.”). Numerous district courts have reached the same conclusion, namely, that the statutory estoppel created by § 315 does not apply to invalidity grounds presented in an IPR petition but denied institution by the PTAB.¹ *See Milwaukee Elec. Tool Corp. v. Snap-On Inc.*, 271 F. Supp. 3d 990, 1028 (E.D. Wis. 2017) (“[D]enial of an IPR petition is simply not an

¹ *See Verinata Health, Inc. v. Ariosa Diagnostics, Inc.*, No. 12-cv-05501-S1, 2017 U.S. Dist. LEXIS 7728, at *10 (N.D. Cal. Jan. 19, 2017) (noting uniform treatment of *Shaw* in district courts); *Intellectual Ventures I LLC v. Toshiba Corp.*, No. 13-453 SLR, 2017 U.S. Dist. LEXIS 3800, at *2 (D. Del., Jan. 11, 2017) (there “can be no dispute that estoppel does not apply to invalidity grounds that were raised by a petitioner . . . but rejected by the Board as instituted grounds[.]”); *Intellectual Ventures I LLC v. Toshiba Corp.*, No. 13-453 SLR, 2016 U.S. Dist. LEXIS 174699, at *38-39 (D. Del., Dec. 19, 2016) (same); *Depomed, Inc. v. Purdue Pharma L.P.*, No. 13-571 MLC, Mem. Op. at 12 n.4 & 16 (D.N.J. Nov. 4, 2016) (“[I]f an invalidity ground is raised in a petition for IPR, but the PTAB declines to institute an IPR as to that invalidity ground, the estoppel provisions of 35 U.S.C. § 315(e) do not apply to said invalidity ground because it was not raised nor could it have reasonably been raised *during* that IPR.”) (emphasis in original); *Illumina, Inc. v. Qiagen N.V.*, No. C 16-02788 WHA, 2016 U.S. Dist. LEXIS 122571, at *16-17 (N.D. Cal. Sept. 9, 2016) (holding that “the arguments that Qiagen raises herein, which were not instituted by the IPR, are not barred by Section 315(e)(2)”).

adjudication of an invalidity contention. Holding otherwise would deny the petitioner a full and fair opportunity to litigate the petitioned but non-instituted ground.”) (citation omitted).

Even district courts that follow a narrow view of *Shaw* (where estoppel applies to grounds *not* raised in an IPR petition but that were reasonably available) still hold that grounds raised in an IPR petition, but denied institution, are exempt from estoppel. *See Douglas Dynamics, LLC v. Meyer Prod. LLC*, No. 14-CV-886-JDP, 2017 WL 1382556, at *5 (W.D. Wis. Apr. 18, 2017) (“*Shaw* makes the Federal Circuit’s view of whether § 315(e) estoppel applies to non-instituted grounds crystal clear.”) (“As long as PTAB has the unreviewable discretion to decline to institute IPR on any ground for any reason, the defendant ought to be able to assert non-instituted grounds in the district court after the IPR is concluded.”); *Oil-Dri Corp. of America v. Nestle Purina Petcare Co.*, No. 15-cv-1067, 2017 WL 3278915, at *4 (N.D. Ill. Aug. 2, 2017) (finding that a plain reading of *Shaw* compels the conclusion that a non-instituted ground is not subject to estoppel, whatever the reason for its rejection); *Biscotti Inc. v. Microsoft Corp.*, No. 2:13-CV-01015-JRG-RSP, 2017 WL 2526231, at *6 (E.D. Tex. May 11, 2017). Indeed, limiting IPR estoppel to grounds actually instituted ensures that estoppel applies only to those arguments, or potential arguments, that received (or reasonably could have received) proper judicial attention. *Verinata Health, Inc. v. Ariosa Diagnostics, Inc.*, No. 12-cv-5501, 2017 WL 235048, at * 3 (N.D. Cal. Jan. 19, 2017).

In view of the clear authority of the statute and case law interpreting it, ZTE should not be estopped from asserting the Dougherty and Shiga references—the invalidity grounds ZTE included in its IPR2018-00110 petition—because those grounds were not instituted. Plaintiff concedes that the Dougherty and Shiga references were included in ZTE’s petition in IPR2018-00110. Pl. Mem. at 7. Plaintiff also concedes that the PTAB denied institution of ZTE’s petition

in IPR2018-00110. *Id.* Plaintiff does not dispute that denying institution of IPR2018-00110 prevented ZTE from raising the Dougherty and Shiga references during the IPR. Accordingly, the Dougherty and Shiga references are non-instituted grounds and fall clearly within *Shaw*'s exception and ZTE is not estopped from asserting the references against the '550 Patent in this case.

Plaintiff's argument that ZTE's "reasonably could have raised" the Dougherty/Shiga grounds in an IPR (Pl. Mem. at 10) ignores the facts. ZTE attempted to raise that ground, but the attempt was denied by the PTAB's unreviewable decision not to institute the petition. Pl. Mem. at 7; *see California Inst. of Tech. v. Broadcom Ltd.*, No. CV 16-3714 GW (AGRX), 2018 WL 7456042, at *7 (C.D. Cal. Dec. 28, 2018) ("There is no reasonable basis by which a petitioner could raise a ground that has been explicitly rejected by the PTAB in making an IPR institution determination."). ZTE could *not* have reasonably raised the Dougherty and Shiga references during the IPR because the PTAB denied institution, therefore the Dougherty and Shiga references are non-instituted grounds and estoppel does not apply here under *Shaw*.

2. ZTE's Filing Of Multiple IPR Petitions Is Irrelevant

Contrary to Plaintiff's assertion, it makes no difference if the non-instituted grounds were included in a single petition or multiple petitions; the only relevant factors here are that the Dougherty/Shiga grounds were included in a petition and not raised *during* the IPR because the PTAB did not institute on those grounds. *Shaw*, 817 F.3d at 1300; *Milwaukee Elec. Tool Corp. v. Snap-On Inc.*, 271 F. Supp. 3d 990, 1030 (E.D. Wis. 2017) ("[The Court] will remain focused on the relatively straightforward task at hand: categorizing the references based on whether they were part of an IPR petition and, if so, whether IPR was instituted upon them, or if not, whether they could reasonably have been included."). Several courts have denied estoppel when the grounds were spread across multiple IPR petitions, as is the case here. In *Verinata Health, Inc.*

v. Ariosa Diagnostics, Inc., No. 12-cv-5501, 2017 WL 235048 (N.D. Cal. Jan. 19, 2017), the defendant filed two IPR petitions that asserted three grounds. *Id.* at *3. The PTAB declined to institute on the Quake and Craig references ground, but the PTAB did institute on one of the other grounds and subsequently issued a final written decision. *Id.* The *Verinata* court did not estop the defendant on the Quake and Craig grounds because that ground was not instituted, regardless of the fact that the ground could have been included in the petition that had a final written decision. *Id.* at *4 (“As *Shaw* dictates, the PTAB did not institute on this ground and, therefore, defendants are not estopped from raising the same invalidity argument in this litigation.”).

Similarly, in *Milwaukee Elec. Tool Corp. v. Snap-On Inc.*, 271 F. Supp. 3d 990 (E.D. Wis. 2017), there were three different IPR petitions filed at different times (January 21, 2015, May 6, 2015, and May 22, 2015) with different grounds, yet the court did not estop the defendant for any grounds that were not instituted. *Id.* at 1027, 1031-32. The defendant could have included all the grounds in a single IPR petition, as Plaintiff suggests ZTE could have, but like ZTE the defendant in that case presented multiple petitions. *Id.* at 1027. Nonetheless, the court followed the clear instruction of *Shaw* and did not estop any non-instituted grounds from *any* of the three separate IPR petitions. *Id.* at 1031-32 (“[T]he Court does not find that IPR estoppel bars any grounds petitioned but not instituted in the relevant IPRs. As the Court has explained, a straightforward application of *Shaw*, coupled with concerns about giving [the defendant] one fair chance to fully litigate its invalidity contentions, require that estoppel not reach these grounds, regardless of the PTAB’s reasons for refusing to institute IPR.”). The *Verinata* and *Milwaukee Elec.* courts did not treat the existence of multiple IPR petitions any differently than if the

defendants had filed a single petition, demonstrating that the only relevant factor is whether the grounds were included in a petition but not instituted by the PTAB.

Plaintiff seems to suggest that ZTE was required to include all possible invalidity grounds in a single IPR petition. Mot. at 10. Given the subject matter requirements for the contents of a petition, in conjunction with strict word count limits, it is often simply not feasible to include all arguments in a single petition.² Thus, multiple petitions are sometimes reasonably required and are not barred by § 315. *Intellectual Ventures I LLC v. Toshiba Corp.*, No. CV 13-453-SLR, 2017 WL 107980, at *1 (D. Del. Jan. 11, 2017) (“IV’s reasoning leads to the conclusion that the PTAB is meant to be the invalidity arbiter of first resort and, therefore, a company that seeks an IPR must bring to the PTAB’s attention every ground the company has reason to think might be relevant; otherwise, it will be estopped from pursuing that ground in litigation. *That outcome appears to be inconsistent with all of the limitations imposed by the PTAB on IPR proceedings* (e.g., page limits for petitions, 14 point type, and portrait-view claim charts) and leaves for trial only those references initially rejected by the PTAB.”)(emphasis added).

3. Plaintiff Cites Irrelevant Cases Involving Prior Art *Not* Included In An IPR Petition

Finally, many of the cases Plaintiff cites are distinguishable from the facts here precisely because ZTE did include the references in one of its IPR petitions, whereas the parties in those cases did not. In *Zitovault v. Int’l Bus. Mach. Corp.*, No. 3:16-cv-962, 2018 WL 2971178 (N.D.

² IPR petitions are limited to 14,000 words, and they must contain all of petitioners’ arguments and evidence (incorporating argument by reference from an expert declaration, for example, is not permitted). 37 C.F.R. § 42.24, 42.104. Patent claims can also be long and technical, with multiple elements that may raise claim construction issues that need to be resolved. In order to successfully challenge a patent claim with uncertain scope, each opening petition must thoroughly address any and all issues potentially raised by a particular claim as well as typically address various conditional if/then scenarios.

Tex. Apr. 4, 2018) and *Trustees of Columbia Univ. in the City of N.Y. v. Symantec Corp.*, No. 3:13-cv-808, 2019 WL 2814682 (E.D. Va. Jul. 2, 2019), the courts estopped the defendants from asserting prior art references that they knew about, but did *not* include in their IPR petition. *Zitovault v. Int'l Bus. Mach. Corp.*, No. 3:16-cv-962, 2018 WL 2971178, at *4 (N.D. Tex. Apr. 4, 2018); *Trustees of Columbia Univ. in the City of N.Y. v. Symantec Corp.*, No. 3:13-cv-808, 2019 WL 2814682, at *10 (E.D. Va. Jul. 2, 2019); *see also Parallel Networks Licensing, LLC v. Int'l Bus. Machines Corp.*, No. CV 13-2072 (KAJ), 2017 WL 1045912, at *12 (D. Del. Feb. 22, 2017); *Network-1 Techs., Inc. v. Alcatel-Lucent USA, Inc.*, No. 6:11-cv-492, 2017 WL 4856473, at *2 (E.D. Tex. Oct. 27, 2017). In contrast, ZTE *did* include the Dougherty and Shiga references in its IPR2018-00110 petition. As discussed above, the relevant factor for estoppel is whether the references were included in a petition and not instituted by the PTAB. The references in Plaintiff's cases were not included in petitions and estoppel applied; whereas ZTE did include the references in a petition, so estoppel does not apply.

B. Summary Judgment Should Be Denied For Obviousness Of The '111 And '766 Patents Because There Are Genuine Disputes Of Material Fact

Dr. Shoemake's invalidity analysis fully addressed the asserted claims of the '111 and '766 patents, explaining how each limitation of the claimed invention would have been obvious to those skilled in the art based on the teachings of Theobald and Shiga. *See generally* Adickman Decl. Ex. 2, App. 000295-312 at ¶¶ 106-190, App. 000334-354 at ¶¶ 295-399. The experts may disagree both on the ultimate legal conclusion of obviousness and on material underlying facts, but this does not reflect any legal deficiency in Dr. Shoemake's analysis that would justify summary judgment.

1. Dr. Shoemake Addressed Every Claim Limitation Without Any Improper Reliance On Hindsight

Plaintiff's assertion that Dr. Shoemake's invalidity analysis failed to address certain limitations of the '111 or '766 patent claims is simply wrong. Dr. Shoemake testified in detail why it would have been obvious to one skilled in the art based on the Theobald and Shiga teachings to supply current in excess of the USB 2.0 limits and to use SE1 signaling to identify the availability of such current. Plaintiff's argument mischaracterizes snippets of Dr. Shoemake's deposition testimony and relies on exactly the type of overly "rigid" obviousness analysis that the Supreme Court rejected in *KSR*. 550 U.S. at 401.

Plaintiff discounts Theobald because it did not expressly teach using USB or using an identification signal to indicate a departure from USB current limits (Pl. Mem. at 19-20, 22-23), but there is no dispute that Theobald *did teach* that his fast-charging solution could be used with "any other suitable multiple pin accessory connector having an external power supply pin and at least one information pin." Adickman Decl. Ex. 2, App. 000302 at ¶¶ 139-140, App. 00338 at ¶¶ 315-16; Ex. 11, App. 001079 at 3:20-26. Dr. Shoemake testified that one skilled in the art would have understood this to include the USB connector, which was well-known at the time and included both an external power supply pin and at least one information pin. Adickman Decl. Ex. 2, App. 000302-03 at ¶¶ 141-42, App. 000338 at ¶¶ 317-18.

Plaintiff next discounts Shiga because it did not teach using the "fourth mode" or "SE1" signal to select a power source or to control charging of a battery (Pl. Mem. at 19-23), but that misses the point. Dr. Shoemake does not rely on Shiga for that teaching. Instead, as Dr. Shoemake testified, it would have been obvious to one skilled in the art to recognize (1) Theobald teaches fast-charging at 8.6 volts and 850 milliamps, (2) Theobald suggests his invention could be used with any suitable multi-pin connector, and one skilled in the art would

have known that included a USB connector, (3) one skilled in the art would have known that using a USB connector would require the additional modification of using some form of signaling to indicate the availability of higher power; and (4) like several other prior art references, Shiga taught using the abnormal SE1 signal to indicate a nonstandard USB feature. *Id.*, App. 000302-307 at ¶¶ 138-160, App. 000337-44 at ¶¶ 313-338. Even the deposition questioning that Plaintiff cites in its brief, Dr. Shoemake explained the difference between what Shiga teaches expressly and what one skilled in the art would have understood from the combination of Theobald and Shiga. Pl. Mem. at 23. As the Supreme Court noted in *KSR*, the prior art must be viewed with both ordinary skill and ordinary creativity; one of skill in the art is not an automaton. 550 U.S. at 421.

Like the Federal Circuit in *KSR*, Plaintiff here draws “the wrong conclusion from the risk of courts and patent examiners falling prey to hindsight analysis.” 550 U.S. at 421. In *KSR*, the Supreme Court reversed the Federal Circuit for making the mistake of assuming “that a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem.” 550 U.S. at 420. Plaintiff makes the same mistake here, arguing that Theobald did not specifically mention USB, and Shiga did not address battery charging. Plaintiff ignores the ordinary creativity one skilled in the art would have used in interpreting Theobald more generally to suggest fast-charging with alternative connectors such as USB, and interpreting Shiga more generally to suggest using SE1 as a nonstandard USB signal that could be used to indicate a condition outside the USB specification (*e.g.*, waking a host computer, as taught in Shiga, or indicating availability of higher power for charging, as Dr. Shoemake testifies here). As Dr. Shoemake has explained, the recognition of these interrelated teachings was well within the skill of an ordinary artisan at the time. This is not hindsight; it is

well-reasoned analysis grounded in specific teachings in the prior art and based on the level of ordinary skill and creativity at the time.

Plaintiff rigidly argues that it would not have been obvious to combine Theobald and Shiga because one skilled in the art would not have made the changes necessary to combine their teachings (Pl. Mem. at 20), but that argument also runs contrary to the Supreme Court’s guidance in *KSR*. As the Court noted, “[i]n automotive design, as in many other fields, the interaction of multiple components means that changing one component often requires the others to be modified as well.” 550 U.S. at 424. Those “other fields” also include mobile communication devices and battery charging—fields in which one skilled in the art would naturally recognize that changing one component (*e.g.*, switching to a USB connector) may also require other changes (*e.g.*, using some form of signaling to indicate a departure from USB power limits). Dr. Shoemake addressed this topic in detail based on the prior art teachings. Adickman Decl. Ex. 2, App. 000295-312 at ¶¶ 106-190, App. 000334-354 at ¶¶ 295-399. He also addressed the topic based on the level of ordinary skill in the art, which he substantiated based on both his own experience and contemporaneous documentation such as other patents. *See, e.g.*, Adickman Decl. Ex. 2, App. 000277-94 at ¶¶ 50-102.

Contrary to Plaintiffs’ arguments, Dr. Shoemake’s invalidity testimony is detailed and thorough, not conclusory. Drawing all reasonable inferences in favor of ZTE, Dr. Shoemake’s testimony presents genuine disputes of material fact that may not be resolved by summary judgment.

2. The Board’s Non-Institution Decisions Do Not Control Here

Plaintiff relies heavily on the Board’s decision not to institute *inter partes* review proceedings with respect to the ’111 and ’766 patents based on Theobald and Shiga. Those decisions do not control the Court’s decision here. *Douglas Dynamics*, 2017 WL 1382556, at *5

(“This court is not bound by PTAB’s refusal to institute IPR of these grounds . . .”). For at least three reasons, the Court should reach its own conclusion as to the merits of ZTE’s invalidity arguments.

First, because it denied institution, the Board never reached final decision on the merits of ZTE’s arguments with respect to the ’111 and ’766 patents. Second, because the Board’s rules preclude any pre-institution reply from the petitioner, ZTE had no opportunity to respond to Plaintiff’s arguments before the Board denied institution. By contrast, in this proceeding, ZTE and Dr. Shoemake have had a chance to consider and account for Plaintiff’s criticisms of the invalidity arguments. Third, Dr. Shoemake has evaluated the Board’s decisions and provided detailed analyses of why he disagrees with the Board’s conclusions, including explaining how the Board misunderstood the prior art and/or offering additional information that the Board did not consider. App. 000299 at ¶¶ 123-125, App. 000336 at ¶¶ 306-310.

3. The Cases Plaintiff Cites Do Not Justify Summary Judgment

None of the cases Plaintiff cites justifies summary judgment here. In *Nike, Inc. v. Adidas AG*, the Federal Circuit agreed with the Board’s conclusion in the underlying *inter partes* review proceeding that “a person of skill in the art would have reason to modify Nishida using the teachings of the Schuessler References to arrive at the unitary, flat-knitted textile upper recited in the proposed substitute claims.” 812 F.3d 1326, 1335 (Fed. Cir. 2016), *rev’d on other grounds*, *Aqua Prods., Inc. v. Matal*, 872 F.3d 1290, 1296 n.1 (Fed. Cir. 2017). The Federal Circuit remanded the decision, but only for the Board to consider secondary considerations of non-obviousness, which Plaintiff does not raise in the present motion. *Id.*, 812 F3d at 1340.

In *Cheese Systems, Inc. v. Tetra Pak Cheese and Powder Systems, Inc.*, the Federal Circuit affirmed summary judgment of no invalidity where the defendant relied solely on hindsight, conclusory expert testimony, and “sketchy” prior art disclosure, which the district

court had described as “at best, ambiguous” as to whether the prior art disclosed the claimed counter-rotation feature. 725 F.3d 1341, 1354-56 (Fed. Cir. 2013)

. By contrast, Dr. Shoemake’s testimony is grounded in unambiguous prior art disclosures. First, Dr. Shoemake expressly cited teaching in the Theobald patent of “fast-charging” a mobile phone at a current level of 850 milliamps at 8.6 volts, which undisputedly exceed the 100-milliamp and 500-milliamp current limits and the 5.25-volt voltage limit of the USB 2.0 specification. Adickman Decl. Ex. 2, App. 000299-300 at ¶¶ 127-131, App. 000291 at ¶ 94; Ex. 11, App. 001079 at 4:41-48. Second, Dr. Shoemake cited additional evidence that those skilled in the art already knew it was possible to exceed the USB 2.0 current limits, including the prior art Dougherty patent, which taught using a USB connection to power and charge a laptop at voltage and current levels well in excess of USB 2.0 limits. Adickman Decl. Ex. 2, App. 000291-92 at ¶¶ 95-98.

Similarly, in *St. Jude Medical, Inc. v. Access Closure, Inc.*, the Federal Circuit affirmed a district court’s decision denying judgment as a matter of law on invalidity. 729 F.3d 1369, 1381 (Fed. Cir. 2013). The court reasoned that the defendant, Access Closure, “fail[ed] to explain why it would have been obvious” to combine the asserted prior art references or “why common sense would lead one of ordinary skill in the art to abandon” one known prior art approach in favor of another. *Id.* Unlike Access Closure, ZTE here relies on testimony from Dr. Shoemake in which he explains in detail why one skilled in the art would have been motivated to combine the teachings of Theobald and Shiga. Theobald explained that “any other suitable multiple pin accessory connector” could be used with its fast-charging system, and the USB connector provided one such well-known example at the time. Adickman Decl. Ex. 2, App. 000302 at ¶¶ 139-140; Ex. 11, App. 001079 at 3:20-26. Dr. Shoemake also testified that one skilled in the

art would have been motivated to use some type of signaling to indicate a departure from normal USB operation, and he cited Shiga and several other prior art references that taught using the abnormal SE1 signal for that type of purpose. Adickman Decl. Ex. 2, App. 000300-01 at ¶¶ 132-37, App. 000287-91 at ¶¶ 85-93.

Finally, in *Harmonic, Inc. v. Avid Technology, Inc.*, the Federal Circuit affirmed the Board's decision that the petitioner's conclusory petition and expert declaration had not shown the prior art to disclose the features of the claimed invention. 815 F.3d 1356, 1363-64 (Fed. Cir. 2016). The court found that the Haskell prior art reference "neither teaches nor suggests the 'predefined period of time' limitation of claim 11." *Id.*, 815 F.3d at 1364. By contrast, Dr. Shoemake has addressed every limitation of the asserted '111 and '766 patent claims, described where each feature was taught in the Theobald and/or Shiga references, and explained why it would have been obvious for one skilled in the art, using their ordinary skill and creativity, to combine those features and arrive at the claimed invention. *See generally* Adickman Decl. Ex. 2, App. 000295-312 at ¶¶ 106-190, App. 000334-354 at ¶¶ 295-399. Plaintiff and its validity expert Dr. Fernald may disagree with Dr. Shoemake about what conclusions may be drawn from these teachings, but Dr. Shoemake's testimony, as supported by specific and unambiguous prior art teachings, present at least a genuine dispute of material fact that precludes summary judgment.

V. CONCLUSION

For the reasons stated above, the Court should deny Plaintiff's motion.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on September 19, 2019, the foregoing was electronically filed with the CM/ECF system, which sent notification of such filing to all counsel of record.

s/ Charles M. McMahon
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